

Air Protection Branch

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NARRATIVE

TO: Hamid Yavari

FROM: Wei-Wei Qiu

DATE: October 25, 2022

Facility Name: **Darling Ingredients Inc. – East Dublin**
AIRS No.: 175-00042
Location: East Dublin, GA (Laurens County)
Application #: SIP-28568
Date of Application: September 15, 2022

Background Information

Darling Ingredients Inc. – East Dublin is an existing rendering plant located at 508 Highway 80 East, East Dublin, Laurens County, Georgia. This facility operates five process lines (three process lines capable of processing red meat or poultry, a feather line, and a blood processing line), a boiler plant, and a wastewater treatment system. The facility processes inedible animal byproducts generated by the beef, swine, and poultry industries as well as spent restaurant cooking oils and trap grease. These raw materials are used to manufacture products such as meat and bone meal, poultry meal, blood meal, as well as tallow, yellow grease, and brown grease. The facility is currently a synthetic minor source with respect to Title V regulations. It is regulated by Air Quality Permit No. 2077-175-0042-S-05-0 issued on October 24, 2019. The area (Laurens County) is attainment for all criteria pollutants.

Purpose of Application

On September 19, 2022, the facility submitted SIP application No. 28568 proposing to replace the current 200 scfm biogas flare with a 1,042 scfm biogas flare, because the existing flare has reached maturity and equipment life span.

Updated Equipment List

Based on the application No. 28568 and additional information provided by the company upon request from the Division, the Equipment List attached to the current permit No. 2077-175-0042-S-05-0 has been updated. The updated Equipment List contains more information on the new flare. The list was duplicated below:

Emission Units			Associated Control Devices	
Source Code	Description	Installation Date	Source Code	Description
0001	Cleaver Brooks Boiler (33.48 MMBtu)	1994	--	--
0002	Cleaver Brooks Boiler (33.48 MMBtu)	1997	--	--

Emission Units			Associated Control Devices	
Source Code	Description	Installation Date	Source Code	Description
0005	Hurst Boiler (50.219 MMBtu) Low NOx Boiler	2010	--	--
0006	Victory Energy Boiler (50.219 MMBtu) Low NOx Boiler	2016	--	--
0007	Victory Energy Boiler (62.773 MMBtu) Low NOx Boiler	2019	--	--
RP01	Meat & Poultry Rendering Process Line 1		CD-04A CD-05 CD-04B CD-01C	Venturi Scrubber Packed Tower Scrubber RTO Counter-Current Room Scrubber
RP02	Meat & Poultry Rendering Process Line 2		CD-06 CD-05 CD-04B CD-01C	Venturi Scrubber Packed Tower Scrubber RTO Counter-Current Room Scrubber
RP05	Meat & Poultry Rendering Process Line 5		CD-04A CD-05 CD-04B CD-03	Venturi Scrubber Packed Tower Scrubber RTO Cross Flow Scrubber
FP03	Feather Process Line 3		CD-03 CD-05 CD-04B	Cross Flow Scrubber Packed Tower Scrubber RTO
BP06	Blood Process Line 6	2019	CD-07A CD-07B CD-05 CD-04B CD-03	Venturi Scrubber Packed Tower Pre-Scrubber Packed Tower Scrubber RTO Cross Flow Scrubber
GEN1	Emergency Generator – Natural gas fired	2017	--	--
FL01	1,041 scfm Biogas Flare	2022	--	--

- (1) This "Equipment List" contains information regarding specific emissions points and was created as a reference for certain other Conditions in this Permit (or Permit Amendment). It is not intended to be a comprehensive list of all air pollution sources at this facility and may not include every minor or fugitive emission source. Future minor modifications or additions at this facility may be exempted from permitting by the Georgia Rules for Air Quality Control and may occur without causing this Table to be updated.

Emissions Summary

The current facility-wide VOC, SO₂ and NO_x emission caps limit the production rate and therefore the amount of wastewater currently being treated by the existing covered anaerobic lagoons, and consequently, limit the amount of biogas being generated by the anaerobic lagoons. Therefore, the flare replacement as proposed by application No. 28568 is not expected to increase air pollutant emissions.

Regulatory Applicability

The flare replacement proposed by the application No. 28568 will not change the applicability of pertinent state and federal rules/standards. The new flare is expected to comply with all the rules/standards applicable to the existing flare.

Permit Conditions

Air Quality Permit Amendment No. 2077-175-0042-S-05-1 is proposed to accommodate the biogas flare replacement described in Application No. 28568. New Condition 7.25 in the draft permit amendment specify how SO₂ and NO_x from the new flare will be calculated. This condition allows the use of new SO₂ and NO_x emission factors from on-site performance testing if deemed necessary by Georgia EPD in future. Consequently, this condition enhances the compliance flexibility of the permit. Conditions 7.26 and 7.27 require the written notifications of the startup of the new flare and the removal of the existing flare, setting the time frame for compliance and record keeping. The proposed permit amendment has also updated Table 1 - Facility Equipment List in the current permit by adding detailed information on the new flare.

Toxic Impact Assessment (TIA)

The proposed biogas replacement will not cause any significant increases in existing toxic air pollutants or emissions of any new toxic air pollutants, no TIA is required.

Summary & Recommendations

Darling Ingredients Inc. - East Dublin submitted SIP application No. 28568 proposed to replace the current biogas flare with a new flare. I recommend issuing Air Quality Permit Amendment No. 2077-175-0042-S-05-1 to accommodate the biogas flare replacement as described in Application No. 28568. The facility is in the East Central District (Athens). Application fee of \$2,000 was paid on October 6, 2022. PA for the application expired on October 21, 2022. The 30-day Public Notice was expired on xxxx, 2022.